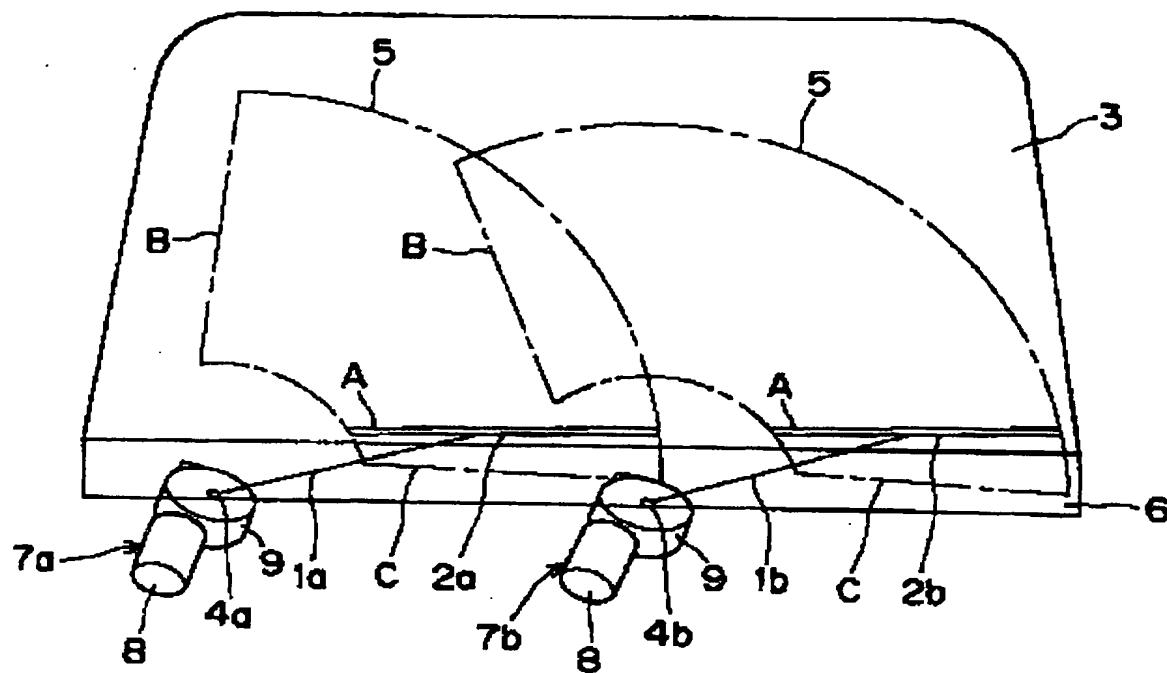


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F I G. 1

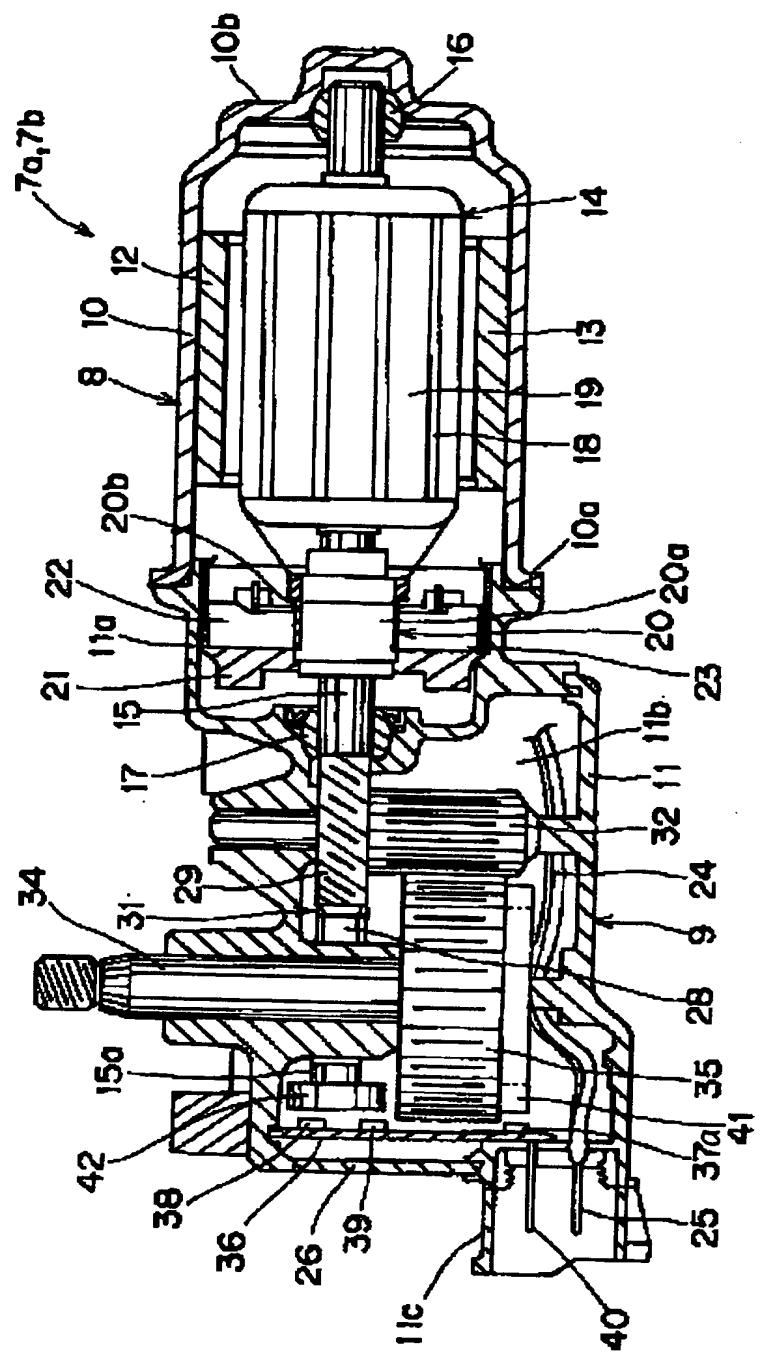
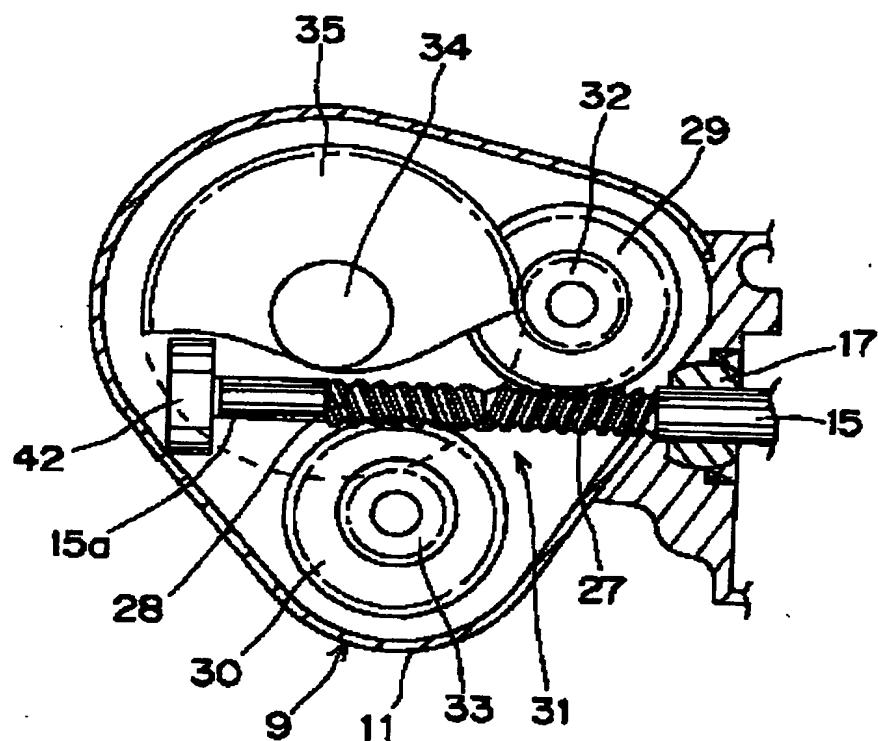


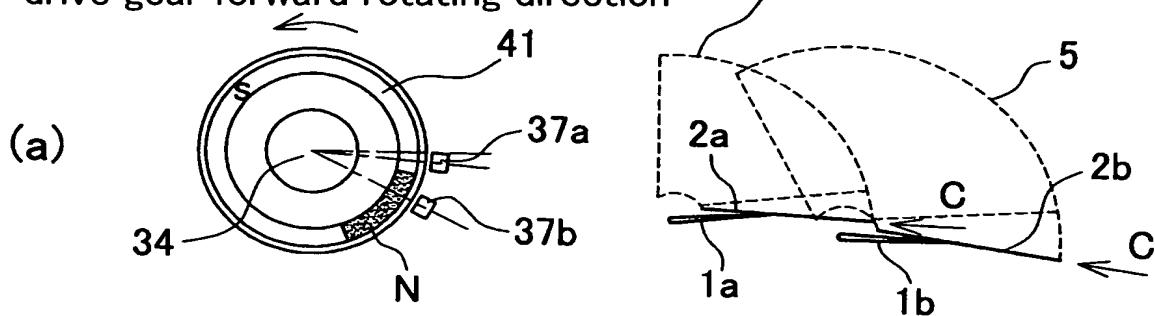
FIG. 2

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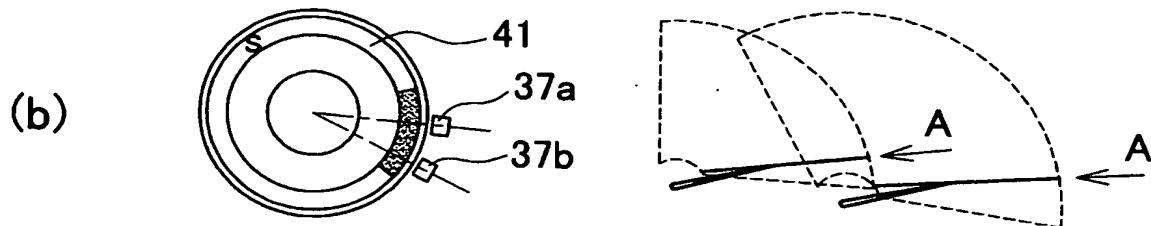


F I G. 3

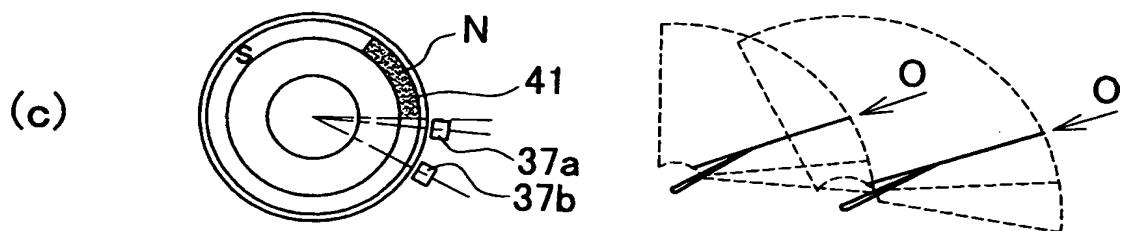
<stored position (37a:S, 37b:N)>
drive gear forward rotating direction



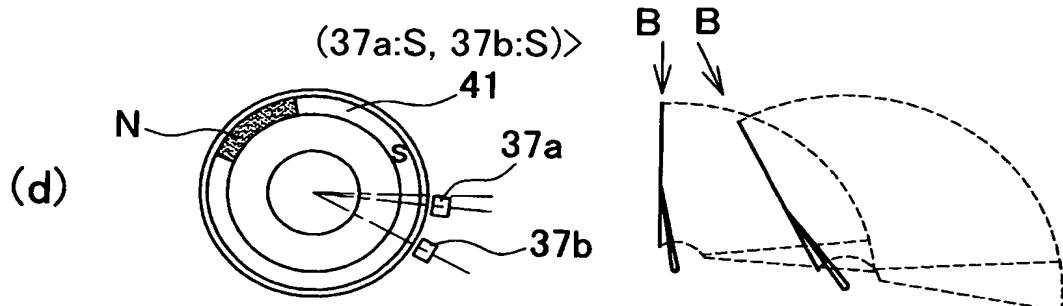
<lower reversal position (37a:N, 37b:N)>



<origin position (37a:forward rotation N → S,
reverse rotation S→N, 37b:S)>



<upper reversal position



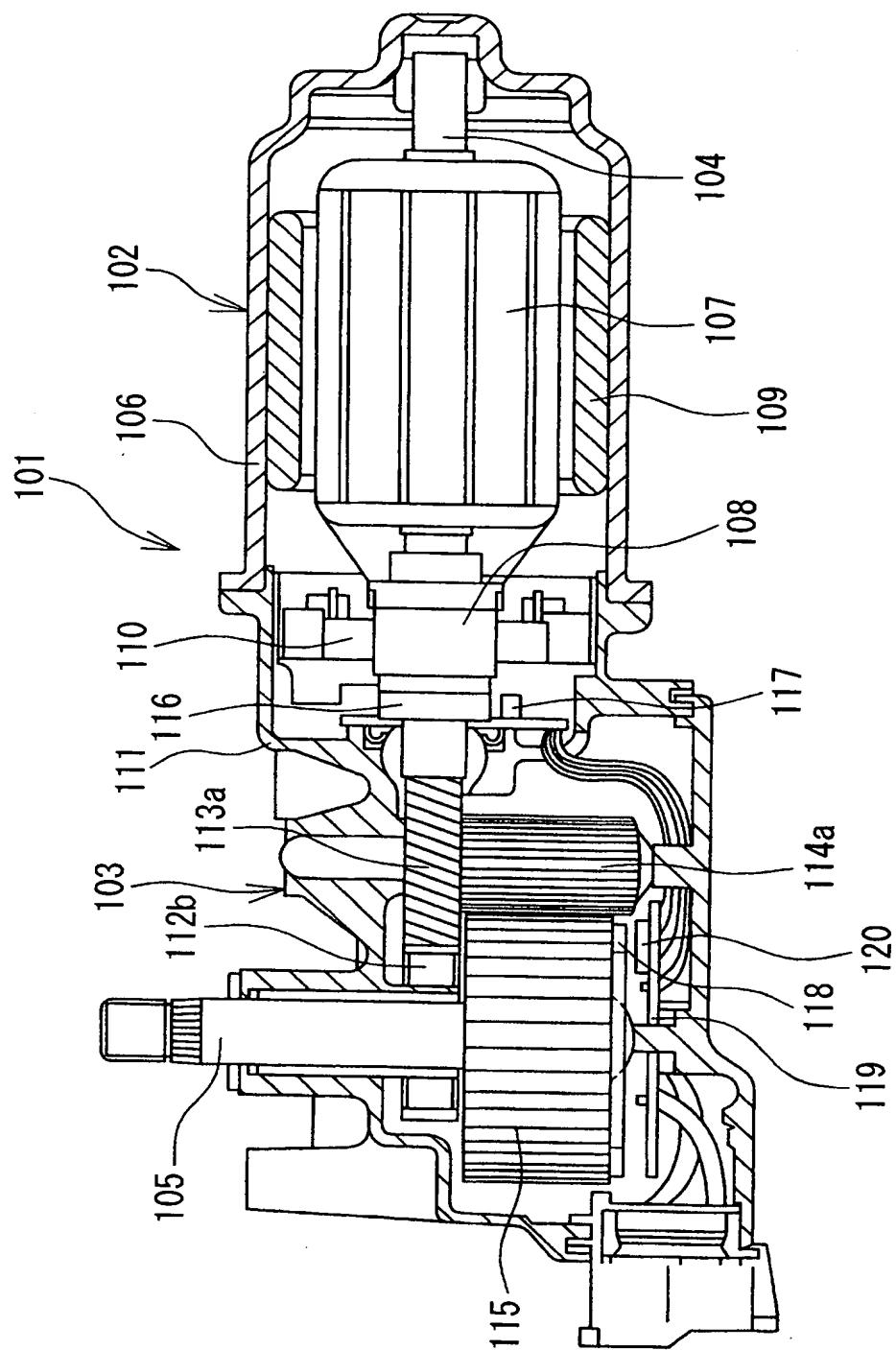
F I G. 4

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	Hall IC 37a (when rotating forward)	Hall IC 37b (when rotating backward)
stored position	S	N
lower reversal position	N	N
origin position reset	N→S or S→N	S
to upper reversal position	S	S

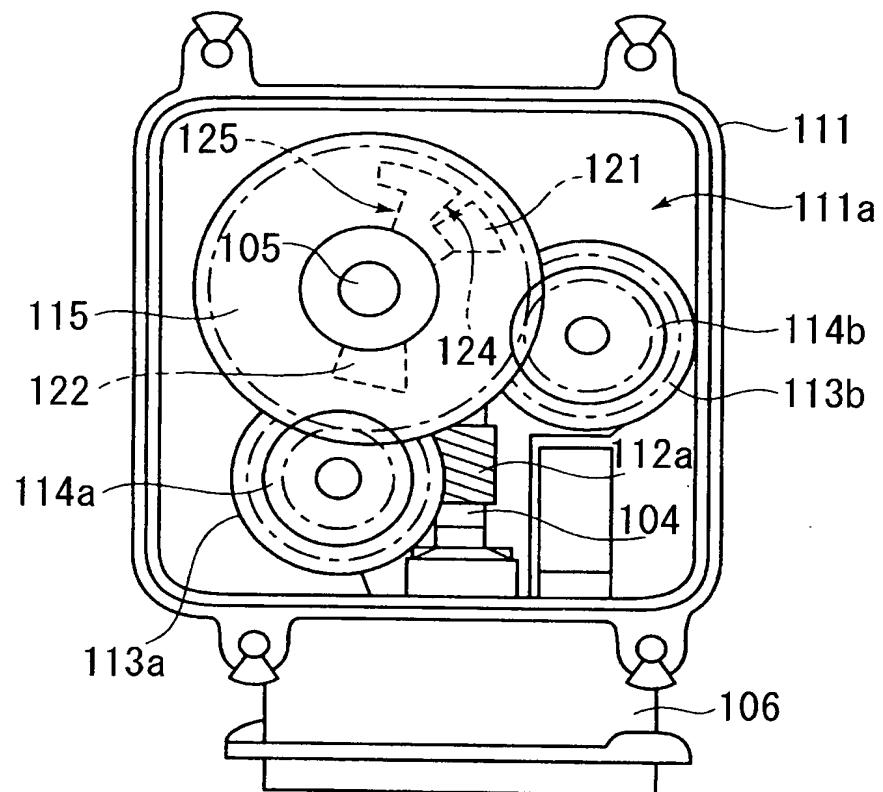
F I G. 5

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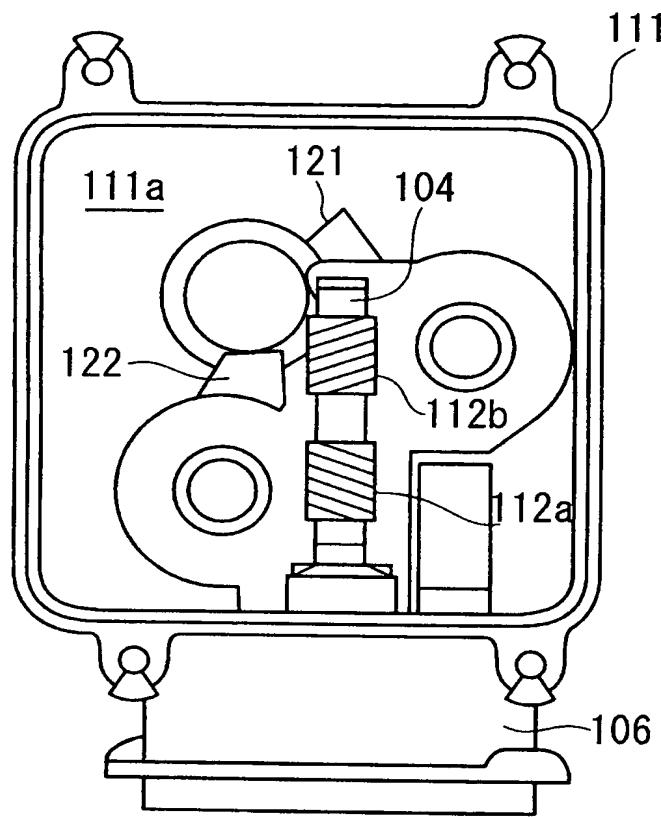
F I G. 6

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F I G. 7

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F I G. 8

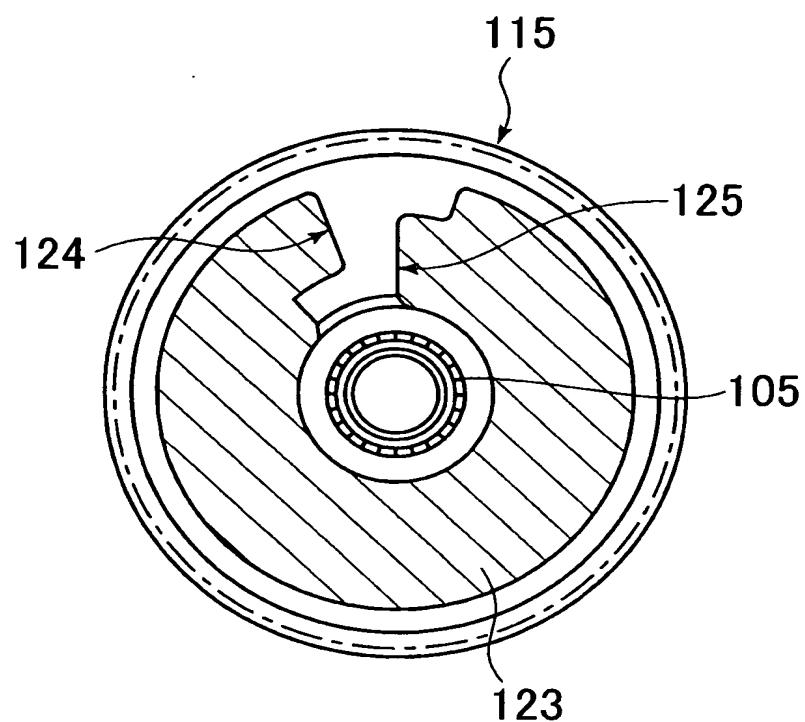


FIG. 9

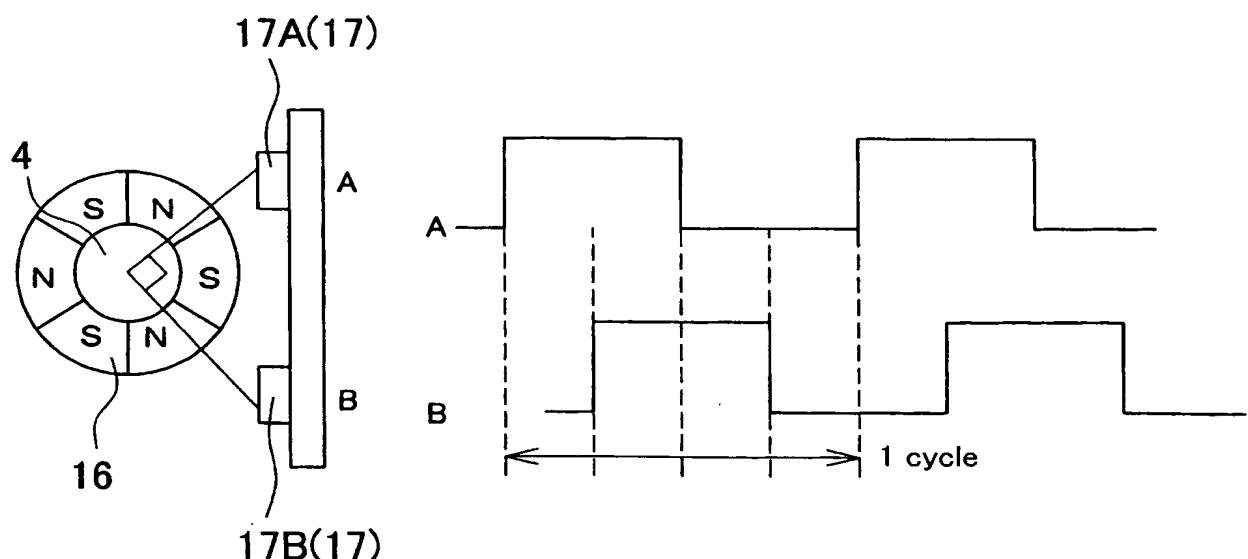
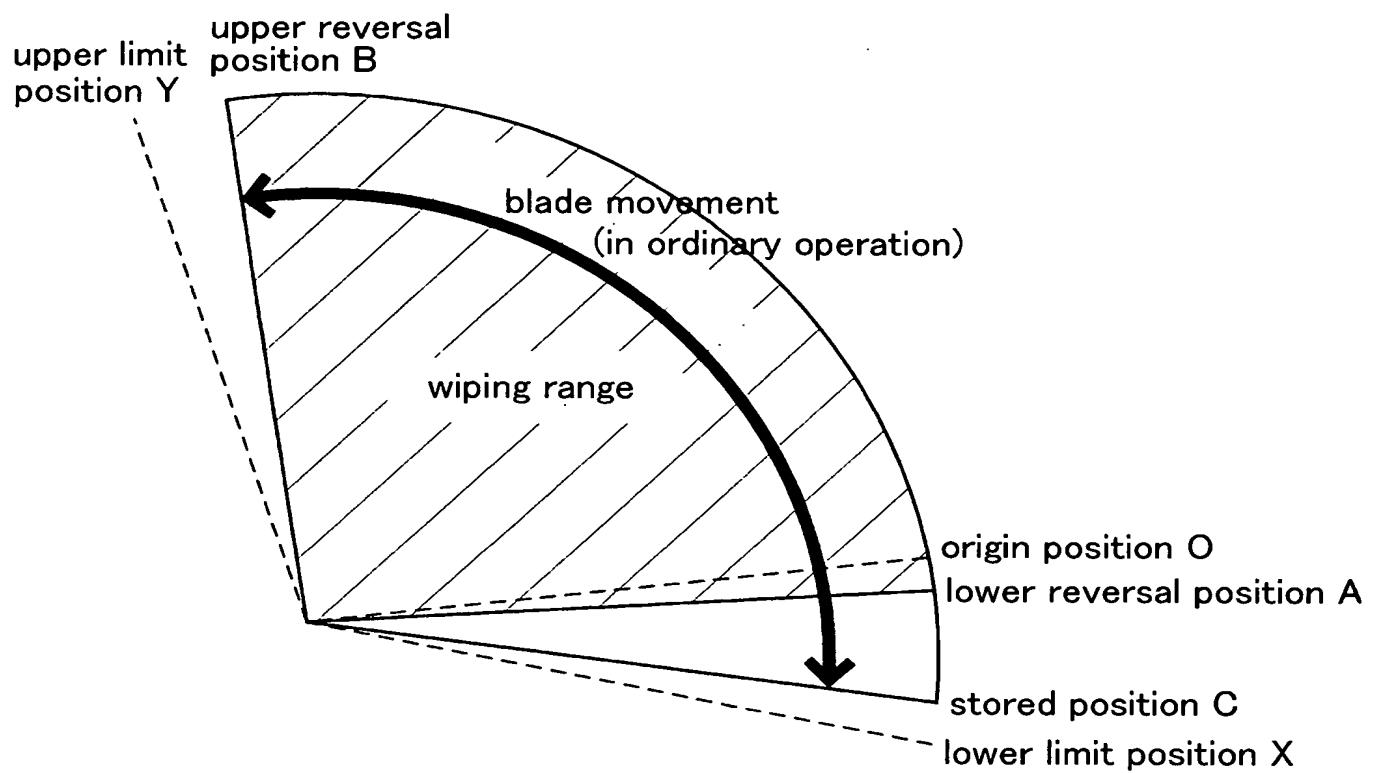


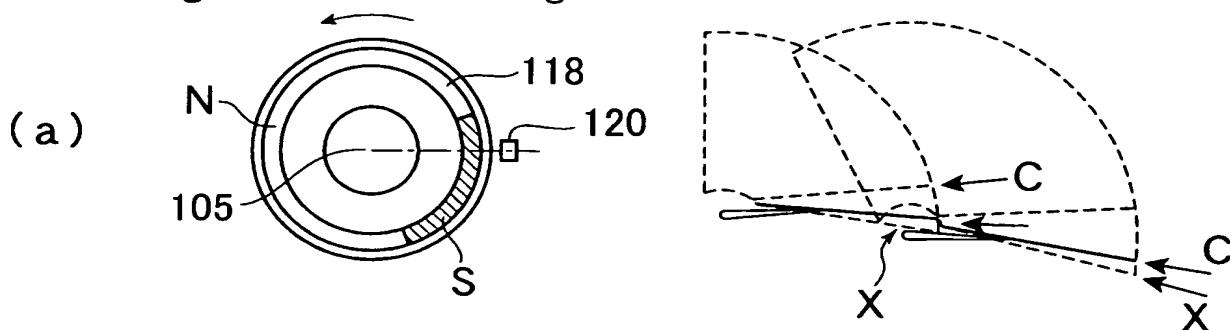
FIG. 10



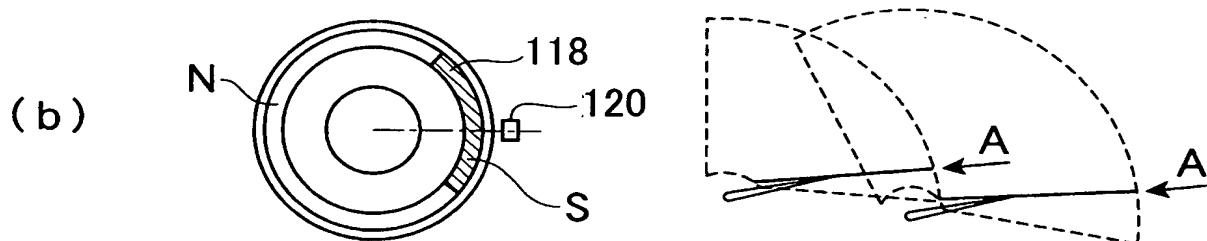
F I G. 1 1

<stored position (120:S)>

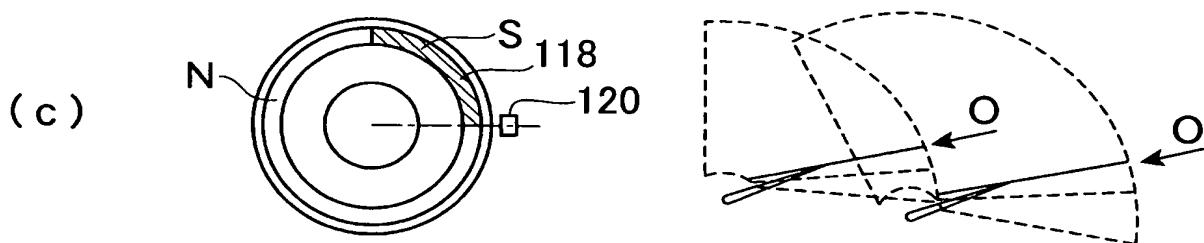
drive gear forward rotating direction



<lower reversal position (120:S)>



<origin position
(120:forward rotation N→S
reverse rotation S→N)>



<upper reversal position (120:N)>

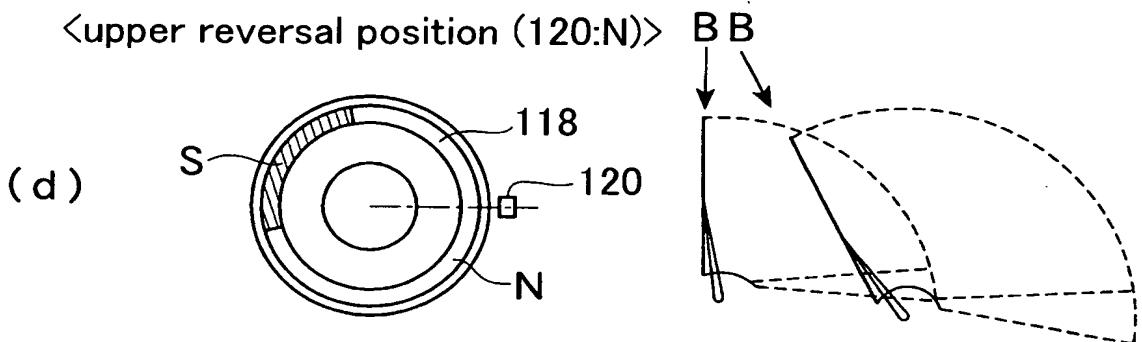
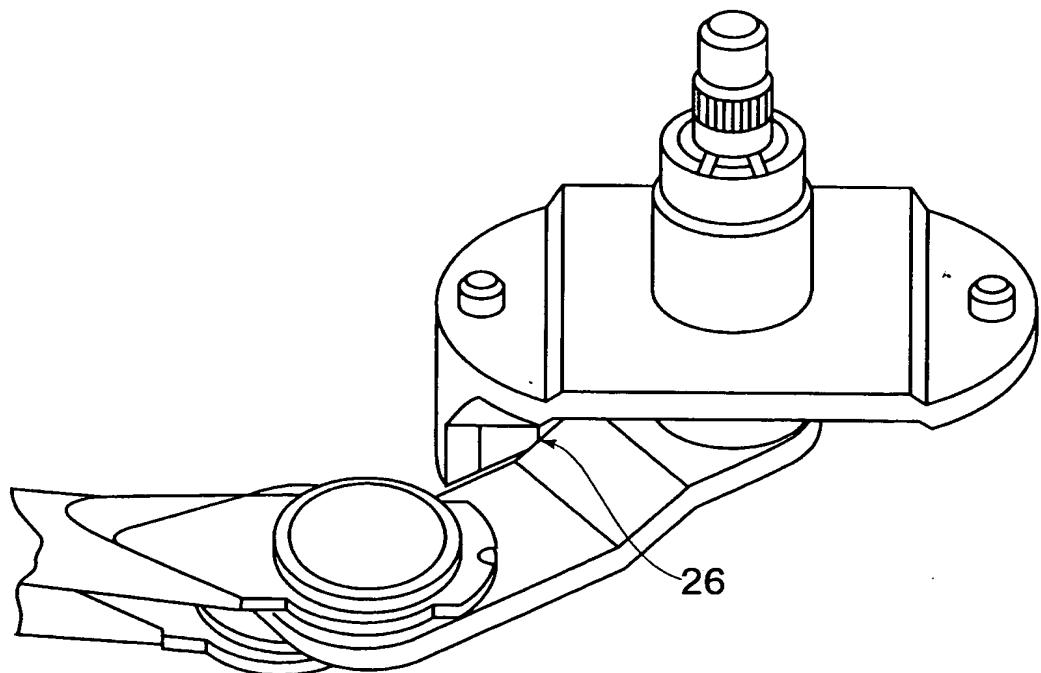


FIG. 12

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	Hall IC 20
lower limit position X	S
stored position C	S
lower reversal position A	S
origin position O	$S \Leftrightarrow N$
origin position O to upper reversal position B	N

F I G. 1 3



F I G. 1 4